### PROJECT DESCRIPTION

### GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE FINAL EQUIPMENT INSTALLATION AND ADJUSTMENT FOR THE ULTIMATE TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 704 AND LOTTSFORD VISTA ROAD/BUSINESS PKWY. IN PRINCE GEORGES COUNTY. MD 704 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.

#### INTERSECTION OPERATION

THIS INTERSECTION IS TO CONTINUE TO OPERATE IN A NEMA SIX PHASE, SEMITRAFFIC-ACTUATED MODE.

#### CONTROLLER REQUIREMENTS

THE EXISTING CABINET AND CONTROLLER ARE TO BE UTILIZED.

#### SPECIAL NOTE

THE INTERCONNECT BETWEEN THIS INTERSECTION AND THE MD 704 AND FORBES BLVD. INTERSECTION SHALL BE MAINTAINED. THE SAMPLING LOOPS ON WESTBOUND MD 704 WEST OF THE INTERSECTION SHALL BE MAINTAINED.

### UTILITY NOTE

72 HOURS PRIOR TO ANY WORK ON THE TRAFFIC SIGNALS, THE CONTRACTOR SHALL NOTIFY THE DISTRICT 3 TRAFFIC SECTION REPRESENTATIVE, MR. RICHARD BUETTNER (301-513-7316) AND THE SIGNAL OPERATIONS SUPERVISOR, MR. EDWARD RODENHIZER (410-787-7652).

ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE BECAUSE THESE UNDERGOUND AND OVERHEAD UTILITIES MAY BE MODIFIED PRIOR TO AND DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE PROJECT ENGINEER IMMEDIATELY.

# WIRING DIAGRAM €ML ∯ML PR Q רדז רדז A,B,C FOR INTERCONNECT TO FORBES BLVD. **----**FOR INTERCONNECT TO MD450 A,B,C,D,E -2-CONDUCTOR CABLE (ALUMINUM SHIELDED) A,B,C,D,E,F,G ----MICRO-LOOP PROBE A,B,C,D,E,F,G, H — 5-CONDUCTOR CABLE (NO.14 A.W.G.) A,B,C,D,E,F,G J — 7-CONDUCTOR CABLE (NO. 14 A.W.G.) LW - LOOP WIRE (NO. 14 A.W.G.) IN FLEXIBLE TUBING ML — MICRO-LOOP PROBE SPLICE NEW LOOP WIRE TO EXISTING SHIELDED CABLE

## EQUIPMENT LIST "A"

### A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION

CATEGORY CODE NO.	QUANTITY	SPEC. SECTION	DESCRIPTION
960015	I EA.	814	12 IN. I WAY 3 SECTION (R,Y,G) ADJUSTABLE POLYCARBONATE VEHICLE SIGNAL HEAD WITH SPAN MOUNTING HARDWARE AND TUNNEL VISORS
960020	I EA.	814	12 IN. I WAY 5 SECTION (R,Y,G,YA,GA) ADJUSTABLE POLYCARBONATE VEHICLE SIGNAL HEAD WITH SPAN MOUNTING HARDWARE AND TUNNEL VISORS
973023	21.34 S.F.	813	SHEET ALUMINUM SIGNS - 2 EACH D 3-2 (VAR. X 16")
900000	☐Ž EA.	810	MICRO LOOP PROBE SET WITH 500 FT. LEAD-IN
900000	2 EA.	810	MICRO LOOP PROBE SET WITH 1000 FT. LEAD-IN

## PHASE DIAGRAM

			2	3	4	5	6	7	8	9	10	***************************************	12	
		® P O	R C C C C C	<b>©</b> <00	(R) (V) (C) (C) (C)	(R) (C) (C) (C) (C)	(C) (C)	(C)	<b>®</b> >©	@\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	@\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	@\\ \(\overline{\chi}\)	RYG	
	PHASE I + 5	<b>R</b> G—	<b>R</b> G—	R	<b>₽</b> G	<b>R</b> G—	R	R	R	R	R	R	R	<b>↑</b>
	I + 5 CHANGE TO	PHASE I		HASE 2	+ 5 0	R PHASE	2 + 6	3						
	PHASE I + 6	<b>d</b> G—	<b></b> -G-	G	R	R	R	R	R	R	R	R	R	1
Ī	I CHANGE	<b>√</b> G Y—	<b></b> G—Y—	G	R	R	R	R	R	R	R	R	R	
	PHASE 2 + 5	R	R	R	<b></b> G—G	<b>4</b> -G—	G	R	R	R	R	R	R	<del>-</del>
Ī	5 CHANGE	R	R	R	<b>4</b> -Y	<b>4</b> -Y—	G	R	R	R	R	R	R	. ↓
ſ	PHASE 2 + 6	G	G	G	G	G	G	R	R	R	R	R	R	4
ĺ	2 + 6 CHANGE	Y	Y	Y	Υ	Y	Y	R	R	R	R	R	R	<b>→</b>
ĺ	PHASE 4 + 8	R	R	R	R	R	R	G	G	G	G	G	G	.   ↑
	4 + 8 CHANGE	R	R	R	R	R	R	Υ	Y	Υ	Υ	Υ	Υ	<b>↓</b>
	FLASHING OPERATION	FL Y	FL Y	FL Y	FL Y	FL Y	FLY	FL R	FL R	FL R	FL R	FL R	FL R	+++

# EQUIPMENT LIST "B"

FHWA REGION NO.		FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
3	MD	SEE TITLE SHEET	388	465	

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

CATEGORY CODE NO.	SPEC. SECTION	QUANTITY	DESCRIPTION
585445	XXX	207 L.F.	24 IN. WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE
805011	805 V	35 4 L.F.	FURNISH AND INSTALL I IN. ELECTRICAL CONDUIT - GALVANIZED STEEL
805125	805	95 L.F.	FURNISH AND INSTALL 2 IN.SCHEDULE 40 RIGID PVC CONDUIT - TRENCHED
■ 805/60	805	<del>₹L.F.</del>	FURNISH AND INSTALL I IN. LIQUID TIGHT NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
813015	813	21.34 S.F.	INSTALL OVERHEAD SIGN
822500	XXX	I EA.	AS-BUILT FOR TRRAFFIC SIGNAL
860015	814	I EA.	INSTALL 12 IN. I WAY 3 SECTION (R,Y,G) POLYCARBONATE SIGNAL HEAD - SPAN MOUNT
860020	814	I EA.	INSTALL 12 IN. I WAY 5 SECTION (R,Y,G,YA,GA) POLYCARBONATE SIGNAL HEAD - SPAN MOUNT
860265	814.	4 EA.	RELOCATE EXISTING SIGNAL HEAD
861104	810 14	76 m L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
861107	810	32 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
861108	810.,	303 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 A.W.G.)
862101	810 <b>28</b> 0	L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
862102	815 90	5 据 L.F.	FURNISH AND INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR)
800000	813	4 EA.	RELOCATE EXISTING OVERHEAD SIGN
800000	810	[∐]  O ≥ EA.	INSTALL MICRO-LOOP PROBE SET
800000	XXX	LUMP SUM	REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

1 RED LINE REV. NO. 1

ULTIMATE SIGNAL

DWG. NO. TS-42

	7-14-97								
	REVISIONS	APPROVALS							
THE WILSON T. BALLARD CO.  CONSULTING ENGINEERS  OWINGS MILLS, MARYLAND	A AUGUST 1996-WTB MODIFY EXISTING SIGNAL SHA NO. PG9005171	ASST. DIVISION CHIEF, TEDD  ASST. DISTRICT ENGINEER, TRAFFIC  CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION							
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Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION

MD 704 (MARTIN LUTHER KING JR. HWY) AND LOTTSFORD VISTA ROAD/BUSINESS PARKWAY

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DRAWN BY: W.J. NIES (FOR STS)
CHECK BY: R.R.ZACHERL (FOR STS)
DIRECTOR, OFFICE OF TRAFFIC & SAFETY

COUNTY

COUNTY